CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-37.
- After this Amendment: Claims 1-9 and 11-37.

Previously Canceled Claims: None.

Claims Canceled Herein: Claim 10.

Claims Previously Amended: Claims 1, 15, and 27.

Claims Amended Herein: Claims 1, 11, 15, and 27.

New claims: None.

Claims:

1.   **(Currently Amended)** A computer-readable medium having a program module with computer-executable instructions that, when executed by a computer, performs a method comprising:

obtaining an omnibus signal comprising multiple input signals received from multiple different sources and mixed together, wherein when the omnibus signal is obtained it is unknown whether ~~one or more~~ at least one of the input signals includes an embedded signal therein;

testing the omnibus signal ~~to determine if~~ comprising the multiple input signals with a detector which views the multiple input signals of the omnibus signal as a single continuous stream which is to be examined for the presence of an embedded signal, and determining that one of the multiple input signals of the omnibus signal includes an embedded signal therein; and

performing a tree-search of a tree-like organizational structure which represents the multiple input signals of the omnibus signal to locate which of the multiple input signals has the embedded signal therein.

2.   **(Original)** A medium as recited in claim 1, wherein the method further comprises locating one of the multiple input signals that has an embedded signal therein.

3. **(Original)** A medium as recited in claim 1, wherein the multiple signals are passed through and consumed by one or more computer-executable program modules, the method further comprises locating one of the multiple input signals that has an embedded signal therein, the locating occurring within about thirty seconds or less of consumption of the located signal.

4. **(Original)** A medium as recited in claim 1, wherein the method further comprises:

locating one of the multiple input signals that has an embedded signal therein;

indicating the located signal.

5. **(Original)** A medium as recited in claim 1, wherein the method further comprises:

locating one of the multiple input signals that has an embedded signal therein;

generating a notification based upon the locating.

6. **(Original)** A medium as recited in claim 1, wherein the method further comprises:

locating one of the multiple input signals that has an embedded signal therein;

impairing the located signal.

7. **(Original)** A medium as recited in claim 1, wherein the method further comprises:

locating one of the multiple input signals that has an embedded signal therein;

muting the located signal when that signal is an audio signal.

8. **(Original)** A medium as recited in claim 1, wherein the method further comprises:

locating one of the multiple input signals that has an embedded signal therein;

impairing one or more of the multiple input signals during the locating;

when the one of the multiple input signals with an embedded signal therein is located by the locating, impairing only the located signal.

9. **(Original)** A medium as recited in claim 1, wherein each of the multiple input signals of the omnibus signal may potentially have an embedded signal therein, the multiple signals being mixed together into the omnibus signal and in a tree-like organizational structure with each of the multiple input signals is a "leaf" in the tree-like organizational structure and each "leaf" represents one of the multiple input signals that is unmixed with other signals.

10. **(Canceled)**

11. (Currently Amended) A medium as recited in claim 1, ~~if the testing finds an embedded signal in the omnibus signal, then the method further comprises progressively~~ <u>wherein performing the tree search further comprises</u> "walking" up the tree-like organizational structure and testing the signal at each "branch" or "leaf" encountered in the walk up the tree-like organizational structure to determine if the signal at that branch or leaf includes an embedded signal therein.

12. (Original) A medium as recited in claim 1, wherein the type of the one or more the multiple input signals is selected from a group consisting of image, audio, video, multimedia, software, metadata, and data.

13. (Original) An operating system comprising a medium as recited in claim 1.

14. (Original) A computing device comprising:
an input device for receiving one or more input signals;
a medium as recited in claim 1.

15.   (Currently Amended) A method for dynamic detecting of robust embedded-signals in a multiple-signal environment, the method comprising:

obtaining an omnibus signal comprising multiple input signals received from multiple different sources and mixed together, wherein when the omnibus signal is obtained it is unknown whether ~~one or more~~ at least one of the input signals includes an embedded signal therein;

~~testing the omnibus signal to determine if the omnibus signal includes an embedded signal therein~~ testing the omnibus signal comprising the multiple input steams with a detector which views the multiple input streams of the omnibus signal as a single continuous stream which is to be examined for the presence of an embedded signal, to determine if at least one of the multiple input steams of the omnibus signal includes an embedded signal therein,

wherein each of the multiple input signals of the omnibus signal may potentially have an embedded signal therein, the multiple signals being mixed together into the omnibus signal and in a tree-like organizational structure with each of the multiple input signals is a "leaf" in the tree-like organizational structure and each "leaf" represents one of the multiple input signals that is unmixed with other signals.

16.   (Original) A method as recited in claim 15 further comprises locating one of the multiple input signals that has an embedded signal therein.

17. (Original) A method as recited in claim 15, wherein the multiple signals are passed through and consumed, the method further comprising locating one of the multiple input signals that has an embedded signal therein, the locating occurring within about thirty seconds or less of consumption of the located signal.

18. (Original) A method as recited in claim 15 further comprising:

locating one of the multiple input signals that has an embedded signal therein;

indicating the located signal.

19. (Original) A method as recited in claim 15 further comprising:

locating one of the multiple input signals that has an embedded signal therein;

generating a notification based upon the locating.

20. (Original) A method as recited in claim 15 further comprising:

locating one of the multiple input signals that has an embedded signal therein;

impairing the located signal.

21. (Original) A method as recited in claim 15 further comprising:

locating one of the multiple input signals that has an embedded signal therein;

muting the located signal when that signal is an audio signal.

22. (Original) A method as recited in claim 15 further comprising:

locating one of the multiple input signals that has an embedded signal therein;

impairing one or more of the multiple input signals during the locating;

when the one of the multiple input signals with an embedded signal therein is located by the locating, impairing only the located signal.

23. (Original) A method as recited in claim 15, if the testing finds an embedded signal in the omnibus signal, then further comprising performing a tree-search of the tree-like organizational structure to locate which one of the multiple input signals has an embedded signal therein.

24. (Original) A method as recited in claim 15, if the testing finds an embedded signal in the omnibus signal, then the method further comprises progressively "walking" up the tree-like organizational structure and testing the signal at each "branch" or "leaf" encountered in the walk up the tree-like organizational structure to determine if the signal at that branch or leaf includes an embedded signal therein.

25. (Original) A method as recited in claim 15, wherein the type of the one or more the multiple input signals is selected from a group consisting of image, audio, video, multimedia, software, metadata, and data.

26. (Original) A computer comprising one or more computer-readable media having computer-executable instructions that, when executed by the computer, perform the method as recited in claim 15.

27. (Currently Amended) An embedded-signal detection system comprising a single embedded-signal detector configured to receive an omnibus mixed signal which includes multiple input signals that have been received from multiple different sources and mixed together, wherein when the omnibus signal is received by the detector it is unknown whether ~~one or more~~ at least one of the input signals includes an embedded signal therein, and wherein the detector is further configured to concurrently test the multiple input signals ~~to determine if at least one of the multiple input signals has an embedded signal therein~~ of the omnibus signal as a single continuous stream which is to be examined for the presence of an embedded signal, to determine if at least one of the multiple input signals of the omnibus mixed signal includes an embedded signal therein.

28. (Original) A system as recited in claim 27, wherein the detector being further configured to locate one of the multiple input signals that has an embedded signal therein.

29. (Original) A system as recited in claim 27, wherein the multiple signals are passed through to a signal consumer, the detector being further configured to locate one of the multiple input signals that has an embedded signal therein, the locating occurring within about thirty seconds or less of consumption of the located signal.

30. (Original) A system as recited in claim 27, wherein the detector being further configured to locate one of the multiple input signals that has an embedded signal therein and indicate the located signal.

31. (Original) A system as recited in claim 27, wherein the detector being further configured to locate one of the multiple input signals that has an embedded signal therein and generate a notification based upon the locating.

32. (Original) A system as recited in claim 27, wherein the detector being further configured to locate one of the multiple input signals that has an embedded signal therein and impair the located signal.

33. (Original) A system as recited in claim 27, wherein the detector being further configured to locate one of the multiple input signals that has an embedded signal therein, impair one or more of the multiple input signals while it locates the one signal with an embedded signal therein, and when the one of the multiple input signals with an embedded signal therein is located, impair only the located signal.

34.   (Original) A system as recited in claim 27, wherein each of the multiple input signals of the omnibus signal may potentially have an embedded signal therein, the multiple signals being mixed together into the omnibus signal and in a tree-like organizational structure with each of the multiple input signals is a "leaf" in the tree-like organizational structure and each "leaf" represents one of the multiple input signals that is unmixed with other signals.

35.   (Original) A system as recited in claim 27, wherein the detector is further configured to perform a tree-search of the tree-like organizational structure, if the detector finds an embedded signal in the omnibus signal, to locate which one of the multiple input signals has an embedded signal therein.

36.   (Original) A system as recited in claim 27, wherein the detector is further configured to progressively "walk" up the tree-like organizational structure if the detector finds an embedded signal in the omnibus signal and is further configured to test the signal at each "branch" or "leaf" encountered in the walk up the tree-like organizational structure to determine if the signal at that branch or leaf includes an embedded signal therein.

37.   **(Original)** A system as recited in claim 27, wherein the type of the one or more the multiple input signals is selected from a group consisting of image, audio; video, multimedia, software, metadata, and data.